

Science Overview Whole School

Year 1	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
	Animals including Humans <ul style="list-style-type: none"> To name a variety of common animals and identify their key features To name the basic parts of the human body and know which sense relates to which part of the body Observe closely Ask questions and recognise that they can be answered in different ways Gather and record data Perform simple tests 		Materials <ul style="list-style-type: none"> To identify and name some common, everyday materials and describe their physical properties Classify materials according to simple properties Ask and answer simple questions Perform simple tests 		Plants <ul style="list-style-type: none"> Name some common plants, flowers and trees and compare To name the different parts of a plant Gather information and record data Observe closely Identify and classify according to simple observable features 	
	Seasonal Changes <ul style="list-style-type: none"> Observe some of the changes that take place over the course of the year 					
Year 2	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
	Animals including Humans <ul style="list-style-type: none"> Know that animals, including humans have offspring Know the basic needs of animals Know that animals need food, exercise and hygiene to be healthy Know basic safety linked to medicine Use secondary sources or observation to answer questions Suggest ways in which questions can be answered 	Materials <ul style="list-style-type: none"> Name a variety of different common materials and describe their properties Give examples of how some common materials are used and suggest why these are chosen for a purpose Suggest a material that a new object can be made from due to its properties Describe how the shape of some solid objects can be changed Name some everyday materials that have been invented Observe closely Identify and classify Perform simple tests 		Living things and their habitats <ul style="list-style-type: none"> To know things can be living or have lived, or have never been alive To understand what a habit and microhabitat are, and can name some animals that live in these Understand how animals and plants depend on each other To understand basic food chains Gather and record data Ask simple questions and perform simple tests Make careful observations and ideas to suggest answers to questions and answer in different ways Identify and classify 		Plants <ul style="list-style-type: none"> Know what a seed is and that it grows into a new plant To know what a bulb is and that it grows into a plant Know that plants need water and a suitable temperature to germinate Know that plants need water, light and a suitable temperature to stay healthy Gather and record data Ask simple questions and perform simple tests Make careful observations, identify and classify

Year 3	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
	<p>Light and Dark</p> <ul style="list-style-type: none"> ● To know that darkness is absence of light ● To know that light is reflected from different surfaces and that is why we see them ● To know that the sun can harm our eyes if we look directly at it ● To know how shadows are formed ● To know how and why shadows change ● To be able to make careful observations ● Make predictions ● Set up simple practical enquiries ● Ask relevant questions ● Record findings effectively 	<p>Rocks and soils</p> <ul style="list-style-type: none"> ● To know the 3 different types of rock ● To know that soil is made from different types of matter and know how it is formed ● To know the difference between a bone and a fossil ● To understand Mary Anning's contribution to palaeontology ● To compare, contrast and classify on the basis of particular features ● To make careful and systematic observations ● To set up simple investigation and present findings in a scientific manner 	<p>Forces</p> <ul style="list-style-type: none"> ● To compare how objects move over different surfaces ● To know that some forces need contact between 2 surfaces and some can act at a distance ● To know what the terms magnetic poles means ● To predict when magnets will attract and repel ● To know some materials that will be attracted to a magnet ● To identify similarities and differences between forces ● To set up simple , practical enquiries ● To draw simple conclusions from findings and present results 	<p>Human Body</p> <ul style="list-style-type: none"> ● To identify and use the scientific name for the main body parts ● To know that humans and some other animals have skeletons and muscles for support, movement and protection ● To describe the way in which the skeletons of other animals provide support, movement and protection ● To know that animals need the right amount and type of nutrition ● To know that animals cannot make their own food. ● Identify and classify eg animals according to their skeleton ● Set up a simple enquiry and record and present findings 	<p>Plants</p> <ul style="list-style-type: none"> ● To identify different parts of a plant and describe their function ● To explore the requirements of plants for life and growth and how they vary from plant to plant ● To understand the way in which water is transported in plants ● To explain the process of pollination and how seeds are formed and dispersed ● Ask relevant questions ● Make careful observations ● Report findings in different ways ● Set up a practical enquiry 	

Year 4	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
	<p>States of matter</p> <ul style="list-style-type: none"> ● To explore a variety of everyday materials and group them according to their characteristics ● To observe a range of everyday solids, liquids and gases ● To observe changes to materials when heated or cooled ● To know that different materials change state at different temperatures ● To explain the water cycle process in terms of changes in matter ● To group and classify a range of different materials according to their properties ● To explore the effect of temperature, observing and recording their findings 	<p>Sound</p> <ul style="list-style-type: none"> ● To explain in simple terms that sound is made through vibrations ● To explain the difference between pitch and volume in terms of how this is made ● To know how pitch and volume can be changed ● To ask relevant questions and use different types of enquiry to answer them ● To make careful and systematic observations ● Report on findings from investigations including through oral and written explanations ● To identify differences, similarities and changes related to scientific ideas and processes 	<p>Electricity</p> <ul style="list-style-type: none"> ● To identify common appliances that run on electricity ● To make a simple series circuit, identifying and naming the basic component parts ● To identify whether a circuit will work and 'debug' simple series circuits ● To recognise simple conductors and insulators and associate metals with being good conductors of electricity ● To describe in simple terms how a switch works in a circuit ● To observe and identify patterns in results ● To plan and carry out a simple test and record findings 		<p>Living things and their habitats</p> <ul style="list-style-type: none"> ● To use the local environment to raise and answer questions about living things ● To observe how a range of habitats change over time ● To explore different ways of grouping a selection of living things ● To recognise the impact (both positive and negative) that humans and environmental changes have of different habitats ● Grouping, sorting and classifying according to self constructed criteria and those of others ● To raise questions and consider how to find the answers to these ● Making systematic observations ● Record and evaluate findings ● To gather, record, classify and present data in a variety of ways. 	<p>Digestion</p> <ul style="list-style-type: none"> ● To identify parts of the human digestive system and explain their function ● To know and describe the differences between and purposes of different types of human teeth ● To know how and why the teeth of carnivores and herbivores differ ● To know that food chains and food webs exist within a habitat and describe some of these ● Ask relevant questions and find the answers in different ways ● Gather evidence and record findings ● Identify similarities, differences and changes related to different scientific ideas